

STATE OF NORTH CAROLINA

Approved Classification: _____

OFFICE OF STATE PERSONNEL

Effective Date: _____

Analyst: _____

POSITION DESCRIPTION FORM (PD-102R-92)

(This Space for Personnel Dept. Use Only)

1. Present Classification Title of Position Transportation Engineer Supervisor I	7. Pres. 15 Digit Position No.	Prop. 15 Digit Pos. No.
2. Usual Working Title of Position Group Leader	8. Department, University, Commission, or Agency Transportation	
3. Requested Classification of Position Transportation Engineer Supervisor I	9. Institution & Division Highways	
4. Name of Immediate Supervisor	10. Section and Unit Location & Surveys	
5. Supervisor's Position Title & Position Number Transportation Engineering Supervisor II	11. Street Address, City and County	
6. Name of Employee	12. Location of Workplace, Bldg. And Room No.	

I. A. Primary Purpose of Organizational Unit:

The primary purpose of Location & Surveys is to serve as support services in providing engineering analysis, mapping and other data for the design of transportation facilities and the acquisition of property for the construction of transportation facilities.

B. Primary Purpose of Position:

Direct Group activities to complete assignments utilizing in-house resources and private engineering firms. This person will manage the Group's safety program in keeping with Department and Unit policy. This individual will supervise engineers and technicians performing precise and comprehensive route location surveys, right of way and other types of property surveys, geodetic surveys, surveys to support Photogrammetry, surveys to gather and evaluate data for the Hydraulics Unit, and other surveys as requested of the Unit. The Group Leader will evaluate project scopes and time requirements to determine assignments to be completed in-house and those that will require assistance by a private engineering firm. This individual will serve as Project Negotiator with private engineering firms on projects using limited service contracted firms. This individual will be in responsible charge of all project data transmitted by the Group. This position will manage the administrative duties of the Group including personnel recruitment, performance management, personnel and time records, equipment inventory, and recommend candidates for employment or promotions.

C. Work Schedule:

8:00 AM to 4:30 PM, or some variation thereof, Monday through Friday, for a total of 40 hours per work week. Flex time or seasonally variable work hours may be used in individual offices based upon needs and circumstances.

D. Change in Responsibilities or Organizational Relationship:

Duties of this position have expanded to include additional responsibilities in the area of contract administration dealing with utilization of private engineering firms to aid in project development. Other additional responsibilities include the direct supervision of all personnel in a field office.

- II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES: Method Used (Check One) Order of importance _____
Sequential order _____

Place an asterisk (*) next to each essential function. (See instructions for complete explanation.) Please note percentage of time for each function.

No. %

- | | |
|---------|--|
| 1 5 | Safety - The Group Leader is responsible for directing all safety activities of the Group. This responsibility includes scheduling and insuring that safety meetings are held, all accidents and near misses are investigated with the necessary documentation completed, and maintaining an adequate supply of signs and safety equipment. This position is responsible for supervising the Transportation Engineer I in traffic analysis and preparing workzone signing plans for in-house and PEF projects as needed. |
| 2 35 | Direct Project Activities - The Group Leader is responsible for all project development assigned to the Group. This person will evaluate requests incorporating the recommendations of the TE I and TT VI to determine the designability of the request and discuss requests with designers to insure coverage is adequate and practical. The Group Leader evaluates the workload and determines which assignments will be completed by in-house resources and which projects will be contracted to private engineering firms. This position will be the direct supervisor for TT IVs performing in-house projects. The Group Leader is in responsible charge of all data transmitted from the Group. It is the responsibility of this position to insure that all data has been checked, reviewed, analyzed, and is complete and accurate before transmitting. This responsibility includes both in-house and PEF data. The Group Leader will schedule special equipment needed to perform project control or other tasks that are not part of normal project development. |
| 3 30 | Contract Administration - Project scoping and time estimates prepared by the Transportation Engineer I and the Transportation Technician VI are reviewed by the Group Leader for completeness, accuracy, and practicality. The Group Leader will compare scoping minutes and time estimates prepared by the TE I and TT VI and those submitted by the private engineering firms and negotiate the amount of time required to complete the assignment. This position will supervise the TE I and TT VI as they monitor projects completed by PEFs. The Group Leader will determine when the assignment is complete and advise the Central Office that payment is warranted. |
| 4 20 | Personnel - The Group Leader will administer the NCDOT personnel policies within the Group. This includes staffing the group, administering performance management, maintaining personnel and time records, and taking the lead in administering discipline with the approval of Unit management. |
| 5 5 | Training - The Group Leader will determine the training needs of those in the group and work toward providing the needed training. This may require the Group Leader to aid in training or identify resources in the Group to train others or request assistance for training. |
| 6 5 | Other duties - as defined by supervisor or Unit management. |

- II. B. OTHER POSITION CHARACTERISTICS: (con't)

1. Accuracy Required in Work:

Engineering and surveying measurements and calculations necessary to millimeter reporting is required. Time records must be accurate to within 6 minutes to insure correct salaries. Absolute accuracy in documenting personnel actions is mandatory. Accurate records of contract negotiations must be maintained to insure proper procedures are followed and must be available for audit.

2. Consequence of Error:

Project delays and increased costs in preconstruction project development and during construction can result from poor execution of the duties of this position. Inaccurate procedures and/or failure to follow established guidelines and procedures can result in erroneous data being conveyed to others for use in design or property acquisition, requiring re-surveys and redesign causing project delays and cost overruns. Poor control network establishment can result in complications in design and construction of adjoining projects. Erroneous data or failure to follow proper procedures could result in loss of court cases in which this position is involved. Misrepresentation or poor presentation can result in establishment of poor relations with property owners, which can then result in problems with those property owners throughout the design and right of way phases of projects. Poor understanding of legal and/or technical aspects of project can result in additional costs for litigation or further costs in proper establishment of boundaries. Faulty traffic control plans or misuse of policies could result in serious injury or death to survey crew members or the traveling public. Mishandling of personnel issues could result in improper disciplinary actions. Failure to insure confidentiality of negotiated time estimates could result in higher project cost and litigation against the Department.

3. Instructions Provided to Employee:

Position requirements include sufficient experience and knowledge to enable the employee to perform the duties of this position. Goals are defined and procedural guidelines are established. Deadlines are established when applicable. It is usually up to the employee to ensure completion of tasks in a timely and accurate manner, and to determine the best method to resolve issues, provide and present data, or prepare for the assigned task. Instructions may be oral or written and may be general or specific in nature, according to the type and scope of work.

4. Guides, Regulations, Policies and References Used by Employee:

NCDOT Highway Design Manual; AASHTO Geometric Design Policy; CADD and other computer references and manuals; General Statutes of North Carolina as related to Highways; NCDOT Personnel Manual; NCDOT Field Fiscal Procedures Manual; NCDOT Workplace Safety Manual; NCDOT and FHWA Manuals on Uniform Traffic Control Devices (MUTCD); Legal Principles of Boundary Surveying and other texts on surveying; various engineering and surveying texts including cadastral, geodesy, and route location; general practices, principles, procedures, and ethics of professional engineering and surveying as described by the NC State Board of Registration for Professional Engineers and Registered Land Surveyors; dictionary.

5. Supervision Received by Employee:

Once initial training has been completed, this is an independent position supervised by the Area Locating Engineer as needed. Problems are either resolved at this level or referred to supervisors for involvement and resolution. Tasks and duties may be reviewed during and after completion, but due to the independent operation of this position, specific activities that lead to task accomplishment are not supervised on a daily basis. Personnel matters are reviewed with supervisors as needed and action taken.

6. Variety and Purpose of Personal Contacts:

Personal contact is with the general public, interviewees, staff of other Units, Divisions, or Branches of NCDOT, representatives of private engineering firms that may be doing work for this Unit, attorneys representing NCDOT or contesting property owners, County Manager's or Register of Deed staff working in tax offices, municipal engineering units, and utility representatives.

7. Physical Effort:

Physical labor involves both office and field work. Outside work may occur in any type of geographic conditions, at any time of day. Some physical labor such as traversing rough terrain, Travel and work in different areas of the state may be required.

8. Work Environment and Conditions:

Work is 80% indoors, in a controlled environment; 20% of work requires field visits or activities in project development and review. Outside work is subject to any type of weather conditions and may involve periods of time in adverse conditions. This employee may be exposed to high volumes of traffic, animals, insects, snakes, and poisonous plants. Employee may also be required to confront irate citizens.

9. Machines, Tools, Instruments, Equipment and Materials Used:

Computers; CADD workstations; hand-held calculators; triangles, scales, and other hand-drafting or measuring equipment; manuals; large photographs and plan sheets; telephone. A working knowledge of the capabilities of survey equipment such as electronic theodolites, GPS receivers, data collectors, and others is required. Operation of motor vehicles is required.

10. Visual Attention, Mental Concentration and Manipulative Skills:

Computer/calculator operation, writing memos, and compiling reports require keypunch and writing abilities. Mental concentration is required to plan and coordinate field activities, review data, solve engineering problems, and work with others in problem solving. Visual as well as mental attention and ability is required in reviewing data and project evaluation. Manipulative skills are required to diffuse hostile situations with property owners who object to project impacts.

11. Safety for Others:

This position is in responsible charge of the safety program for the Group insuring safety materials are available and used as designed. Group Leader directs safety meeting and appoints investigation committees and follows-up on recommendations made by the committee. This individual is responsible for safety related documentation.

12. Dynamics of Work:

Engineering and design standards are often revised. Methods, procedures, and equipment used for collecting route location and other survey data, including survey equipment and computer hardware and software, are always being revised, upgraded, or improved. These changes require a continuous upgrading and maintenance of knowledge of the engineering and surveying professions.

III. KNOWLEDGES, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS:

A. Knowledge, Skills and Abilities:

Thorough knowledge of the principles and practices of Civil Engineering as applied to the design of transportation related facilities. Thorough knowledge of procedures, methods and equipment used in performing engineering and other surveys. Thorough knowledge of NCDOT personnel policies. Thorough knowledge of mathematical applications, including algebra, geometry, and trigonometry. Overview of CADD capabilities and skilled in the use of office equipment such as calculators and computers. Ability to read, interpret and explain such things as construction plans, court records, title records, technical and procedural manuals. Ability to plan, direct, supervise, train, and evaluate the work of others; ability to understand and follow written or oral instruction, communicate with the general public and other non-technical groups; take notes and prepare reports. Must have the ability to evaluate situations and make decisions. Positions require good supervisory skills to direct, coach, and evaluate employees.

B. 1. Required Minimum Training:

Graduation from a four year college or university with a Bachelor of Science in Civil Engineering and three years of progressive Transportation Engineering experience; or graduation with a Bachelor of Science in Engineering Technology and four years of progressive Transportation Engineering experience; or an equivalent combination of education and experience.

2. Additional Training/Experience:

Additional training as needed will be supplied by supervisor and Location & Surveys Unit or NCDOT Training Personnel.

3. Equivalent Training and Experience:

Graduation from high school and eleven years of progressive transportation technician experience at the Transportation Technician III level or above or an equivalent combination of training and related experience. In lieu of a civil engineering degree (BS or AS), successful completion of the ITRE Highway Engineering Concepts Course will be required.

C. License or Certification Required by Statute or Regulation:

NC Driver's License is required.
Professional Engineering registration preferred

- IV. CERTIFICATION: Signatures indicate agreement with all information provided, including designation of essential functions.

Supervisor's Certification: I certify that (a) I am the Immediate Supervisor of this position, that (b) I have provided a complete and accurate description of responsibilities and duties and (c) I have verified (and reconciled as needed) its accuracy and completeness with the employee.

Signature _____ Title: _____ Date: _____

Employee's Certification: I certify that I have reviewed this position description and that it is a complete and accurate description of my responsibilities and duties.

Signature _____ Title: _____ Date: _____

Section or Division Manager's Certification: I certify that this position description, completed by the above named immediate supervisor, is complete and accurate.

Signature _____ Title: _____ Date: _____

Department Head or Authorized Representative's Certification: I certify that this is an authorized, official position description of the subject position.

Signature _____ Title: _____ Date: _____